

WHAT IS CLAIMED IS:

1. A drive having at least one linear motor, which linear motor includes a secondary part positioned between a first primary part and a second primary part, the  
5 drive comprising: at least one compensation means which acts by a compensating normal force against an attractive normal force between each of the primary parts and the secondary part.
2. The drive according to claim 1 wherein said compensation means carries the  
10 primary parts.
3. The drive according to claim 1 wherein the primary parts carry at least one guide element which guides the drive along the secondary part and that the primary parts carry at least one brake element which holds and brakes the drive along the secondary  
15 part.
4. The drive according to claim 3 wherein the primary parts carry at least one setting element which moves at least one of the guide element and the brake element towards the secondary part or away from the secondary part and brings said at least one  
20 of the guide element and the brake element into contact with the secondary part.
5. The drive according to claim 4 wherein the primary parts are separated from the secondary part by air gaps which change in the width thereof by movement of at least one of the guide element and the brake element towards and away from the secondary  
25 part.
6. The drive according to claim 5 wherein the width of the air gaps is at a maximum and the attractive normal force between the primary parts and the secondary part is small in a first end setting where the guide element guides the drive into contact  
30 with the secondary part and the width of the air gaps is at a minimum and the attractive normal force between the primary parts and the secondary part is large in a second end setting where the brake element keeps the drive in contact with the secondary part.

7. The drive according to claim 4 wherein the setting elements do not move the compensation means towards or away from the secondary part, the brake element is connected by way of a brake lever with a support means and the brake element presses by a lever against the secondary part.

5

8. The drive according to claim 7 wherein the support means comprises at least one safety brake trigger, that the activated safety brake trigger fixes the compensation means, which is biased by the compensating normal force, at least partly in the primary parts and the deactivated safety brake trigger releases the compensating normal force of the compensation means.

9. The drive according to claim 1 wherein the drive comprises a plurality of linear motors connected in series.

15 10. A method of operating a drive with at least one linear motor, which linear motor includes a secondary part positioned between a first primary part and a second primary part, comprising the steps of: a) providing an attractive normal force that acts between each of the primary parts and the secondary part along a direction (Y) of action transverse to a direction (X) of movement of the drive; and b) providing at least one  
20 compensation means that acts against the attractive normal force by a compensating normal force.

11. The method according to claim 10 including a step of operating the linear motor in a first operating mode wherein the linear motor is deactivated and solely the  
25 compensating normal force of the compensation means spaces the primary parts from the secondary part, which guides the drive in a holding manner, or operating the linear motor in a second operating mode wherein the linear motor is activated and a width of air gaps between the primary parts and the secondary part is set to a maximum, which reduces the attractive normal force between the primary parts and the secondary part and guides the  
30 drive in holding manner, or operating the linear motor in a third operating mode wherein the linear motor is activated and a width of air gaps between the primary parts and the secondary part is set to a minimum, which increases the attractive normal force between

the primary parts and secondary part and brakes the drive, or operating the linear motor in a fourth operating mode wherein the compensation means is deactivated and the primary parts are pressed by the full attractive normal force of the linear motor against the secondary part, which brakes the drive.

5

12. An elevator comprising: at least one car for moving persons or goods; a drive including at least one linear motor with a secondary part positioned between a first primary part and a second primary part; and at least one compensation means which acts by a compensating normal force against an attractive normal force between each of the  
10 primary parts and the secondary part.

13. The elevator according to claim 12 wherein said drive drives the car directly or drives a counterweight directly.

14. The elevator according to claim 13 wherein the car and the counterweight are  
15 connected by way of at least one connecting means and the drive moves one of the car and the counterweight with a 2:1 slinging or a 1:1 slinging.

15. The elevator according to claim 13 wherein the car and the counterweight are  
20 connected by way of at least one connecting means and the secondary part extends over one of the entire length of the shaft and one half the length of the shaft.